

# Forum

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- **In Philippines**, the Technical Education and Skills Development Authority (TESDA), the Gokongwei Brothers Foundation, Inc. (GBFI) and Japan Vocational Ability Development Association (JAVADA) co-hosted a skills competition in February 2007 on industrial motor control and pipe welding. At the same time, demonstrations on wax welding were held with cooperation from Matsushita Electric Industrial Co., LTD.
- **In Indonesia**, the Ebara Asia competition and a workshop on the evaluation method of machine manufacturing are to be held in March 2007 at Ebara Corporation, cosponsored by JAVADA. This is to be followed by the National Skills Test on Machine Inspection, which will be cosponsored by the National Body for Professional Certification (BNSP: Badan Nasional Sertifikasi Profesi) and the Indonesia Mold and Dies Industry Association (IMDIA).

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- **In Thailand**, following on from last year, a workshop is to be held in March 2007. Co-hosted by the Department of Skills Development (DSD), this year's workshop will look at machine assembling from the planning stage to its evaluation.

### Workshop on Skills Evaluation Method

#### 1. First workshop (held July 19 - 20, 2006) on machine inspection



This was the first skills workshop to take place in Indonesia and it was held at the Technical Training Center of Matsushita Gobel Education Foundation in Jakarta.

The aim of the workshop, which was supported by National Professional Certification Board (BNSP: Badan Nasional Sertifikasi Profesi) and the Matsushita Gobel Education Foundation, was to train members to become qualified to conduct certification tests for the National Trade Skills Test on Machine Inspection.

There were 16 participants from eight different local companies and educational institutions. They studied assignments from the Machine Inspection Level 3 test and their evaluation methods, and this practical experience led them to gain the necessary skills evaluation know-how.

## 2. Second workshop (held between October 14 - 26, 2006) on maintenance

This is a workshop held in Japan for learning the questions and assignments on the trade skill tests and their evaluation methods.

During the first half of the workshop, which took place at the Overseas Vocational Training Association (OVTA in Chiba prefecture), the participants learned the outline of the evaluation system, machine and electric system maintenance, as well as the making of the practical tests and their evaluation methods.



During the second half, the participants observed the National Skills Competition held in Kagawa prefecture, and learned about the skills competition, its evaluation methods and assignments. They also visited Panasonic Shikoku Electronic Co., Ltd. and broadened their knowledge on in-house training.

## Skill Evaluators Training

This year, training sessions were held in 15 companies and a total of 69 trainees participated.

### Company List

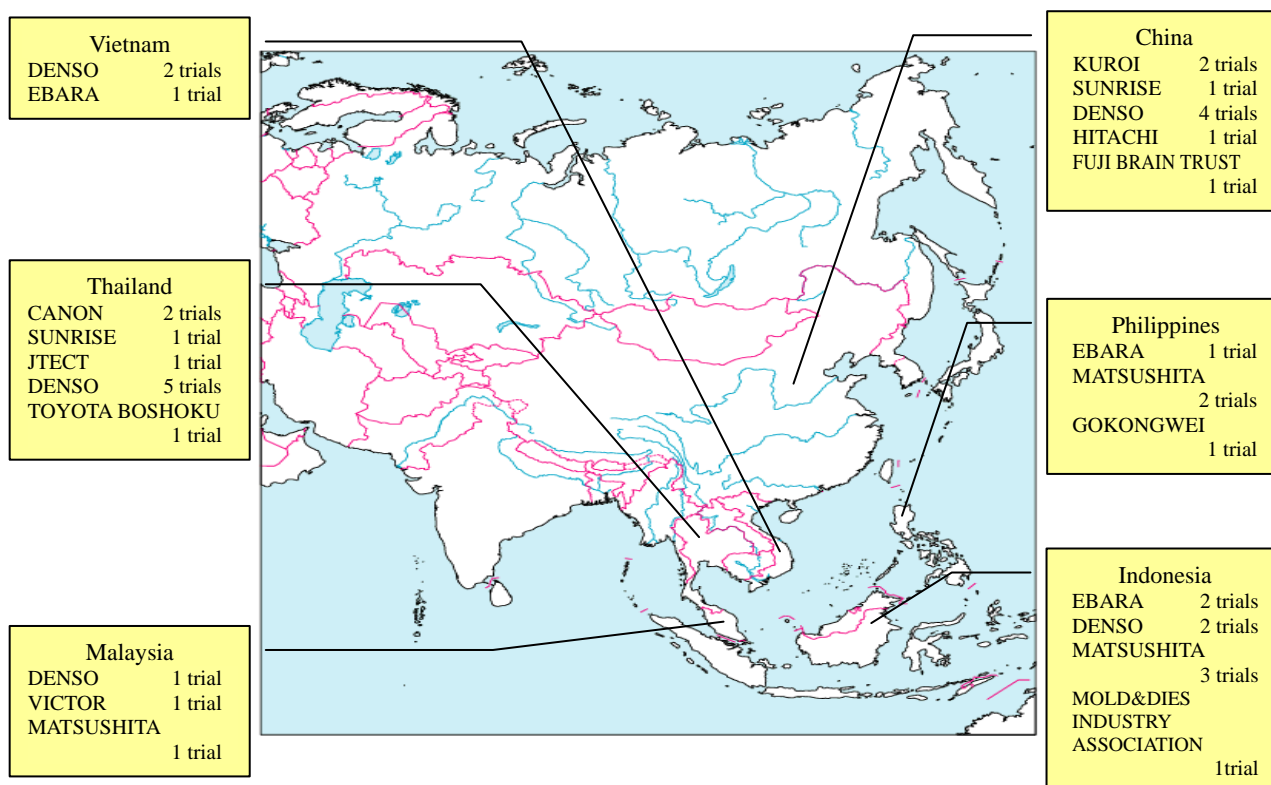
| Company name                           | Company name   |
|--|--|
| ANDEN CO., LTD.                        | NISSAN MOTOR CO., LTD.   |
| EBARA CORPORATION                      | VICTOR COMPANY OF JAPAN, LIMITED   |
| KUROI ELECTRIC CO., LTD.               | HITACHI, LTD. HITACHI WORKS  |
| SUNRISE INDUSTRY CO., LTD.             | FUJI BRAIN TRUST Co. LTD   |
| JTECT CORPORATION                      | PRONICS  |
| DENSO E&TS TRAINING CENTER CORPORATION | MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. HUMAN RESOURCES DEVELOPMENT COMPANY |
| TOYOTA MOTOR CORPORATION               | MAZDA MOTOR CORPORATION  |
| TOYOTA BOSHOKU CORPORATION             |  |
| Total 15 companies                     |  |

## Country List

| Country name                             | Persons | Country name | Persons |
|--|---------|--------------|---------|
| Indonesia                                | 14      | Philippines  | 4       |
| Thailand                                 | 23      | Malaysia     | 6       |
| China                                    | 20      | Vietnam      | 2       |
| Total 69 trainees ( 54 male, 15 female ) |         |              |         |

## Skills Evaluation Trials

This year, 37 trials were conducted in six countries.



## Case report of the Skill Evaluators Training

### *Our Skill Evaluators Training*

**by Mr. Kiyoshi Nakatani, Kuroi Electric Co., Ltd.**

At Kuroi Electric Co.,Ltd., we mainly develop and manufacture lighting equipment. We have two manufacturing sites in Kyoto but none overseas. We are currently working on overseas procurement of parts, and we have entrusted a section of our manufacturing to a company in China. However, the quality of the parts purchased from China was not uniform and thus quality improvement became a critical issue. Even if trainers were sent from Japan to supervise the local factory, things returned to the original situation when the

trainers left the site. Therefore, we thought that training the local supervisors and improving the workers' skills were urgent matters. We were convinced that promoting the spread of the Japanese skills evaluation system to the local factories would improve the workers' skills and the quality of the products, so with support from JAVADA, we engaged ourselves in the skill evaluators training. The aim of the training is to make the trainees understand the structure of the evaluation system in Japan and acquire the skills and knowledge necessary for making evaluations. Our final goal is that these trainees supervise the local workers, improve the workers' skills to the passing level of the trade skill tests, and be able to conduct and evaluate the tests themselves after they return home.



**An evaluator giving instructions to the trainees**

The Skill Evaluators Training sessions were held twice, from June 13 to August 11, and October 30 to December 27, and we accepted three trainees from the company in China that manufactures electronic devices for us. The assignments were the same level as those for the National Trade Skills Test on Electronic Device Assembling Level 2, and followed the curriculum below:

- Step 1: Understanding skills evaluation system in Japan
- Step 2: Understanding quality control and acquiring its methods
- Step 3: Passing the skills tests, mock tests and level check
- Step 4: Evaluating pass or fail, Judgment criteria and grading chart
- Step 5: Acquiring teaching methods and curriculum development



**A student working hard on an assignment**

The role of these three trained evaluators is to return to their country, become leaders and establish a skills evaluation system within their company, and through their activities, develop workers who are focused on improving production and quality. In a trial held in February, five of the trainees that we taught took the test, which was held in the same manner as the trade skill tests held in Japan. Although the time limit was four hours, all five of them completed the test 30 minutes early and passed with outstanding marks. Three of them even successfully completed the evaluation of site construction and management of the days. We plan to hold a second trial in March.



**Evaluators giving grades**



**Sharing their joy as they all passed**

We believe this year's smooth operation, from the skills evaluators training to their trials, will play a part in promoting Japan's skills evaluation system. The trainees have expressed a desire to challenge Level 1 of Electronic Device Assembling and we see this as a drive for skill development. It has been 18 years since we first became involved in the trade skill test on Electronic Device Assembling and we hope that it will continue for a long time, including with our current company in China, and it is our intention to continue giving our support.

## Results of the DENSO Asia Competition

**DENSO INTERNATIONAL (THAILAND) CO., LTD.**  
by Mr. Mitsuharu Koie

(1) Outline of the competition

Title: Manufacturing Forum “ASIA”

Period: 2006/03/01 - 03/03

Venue: DENSO Training Academy (Thailand)

In Amata Nakorn Industrial Park

Number of participants

|           | Managing director | Skill evaluators | Skills competition participants |
|-----------|-------------------|------------------|---------------------------------|
| Thailand  | 0                 | 6                | 45                              |
| Malaysia  | 0                 | 3                | 12                              |
| Indonesia | 0                 | 1                | 2                               |
| Vietnam   | 0                 | 2                | 9                               |
| India     | 0                 | 3                | 13                              |
| Taiwan    | 0                 | 1                | 3                               |
| China     | 0                 | 4                | 24                              |
| Japan     | 3                 | 0                | 0                               |

Competition Events

|                                    | Number of participating companies | Skills competition participants |
|------------------------------------|-----------------------------------|---------------------------------|
| Quality check skills competition   | 15                                | 76                              |
| Screw fastening skills competition | 10                                | 21                              |
| Soldering skills competition       | 5                                 | 11                              |

Using the ideas of JAVADA’s (Japan Vocational Ability Development Association) “Skills Evaluation System Promotion Program (SESPP)”, we planned and managed this competition as the first company representatives skills competition, an extension of the in-house skills competition held in our 22 manufacturing companies in seven countries in Asia.

Led by three members dispatched from our headquarters as managing directors of each event, the skill evaluators from companies in each country who attended the skill evaluators training divided the responsibilities among them. In a very international environment, where several languages were spoken, the evaluators exchanged ideas and took on their duties, striving for a “just and fair management of the competition.” The participants, while bewildered by their unfamiliar



environment, were determined as proud representatives of their companies, and they competed under great pressure, with more focus than they had during practice the day before.

(2) The role and importance of the competition

The skills competition was held as the highest level competition of the in-house skills competition held in our companies throughout Asia, and was based on the goals below:

1. To reaffirm and standardize the skills evaluation guidelines and evaluation methods
2. To compare the skill evaluation results of each company
3. To enhance the skill competition of each company and raise the motivation level of the participants

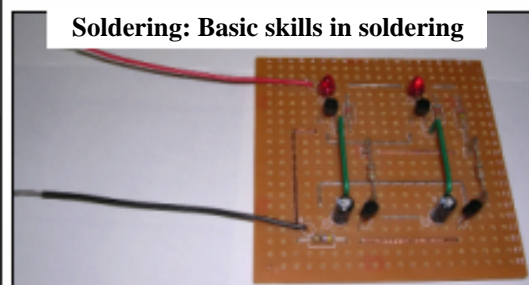
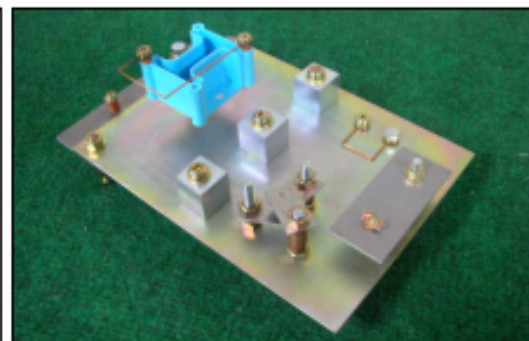


We carried out our undertaking with the aim that the participants of the Skill Evaluators Training sessions held in Japan will become leaders in their company, where they will plan and manage the evaluation methods they had learnt during their training, as well as train skill evaluators and lead the participants of the skills competition. Through this process, we hope that the guidelines on skills evaluation will be passed on to areas in Asia. This competition proved to be a valuable opportunity to confirm the progress and results of our efforts.

(3) Assignments at the competition

**Quality check: Identifying defective products**

**Screw fastening: Basic skills in assembling**



(4) Achievements of the competition

The day before the competition, the evaluators held a meeting where they discussed issues such as the small differences among companies in their evaluation guidelines and methods, and the minor differences caused by the different tools used. While the meeting made progress on standardizing some points, participants of the meeting also realized that in order to make a just and fair evaluation, they must pay attention to many other points that are not listed in the evaluation criteria. Also, the

participants of the competition enjoyed a sense of accomplishment and fulfillment as they were able to display, in one way or another, the result of their hard work.

(5) Impression of the competition

This competition developed from the “Skill Evaluators Training (Japan)”, which led to the “Skills competition in each area”, and led to the “Regional skills competition.” Managed by members of our trained local staff, who were able to further develop themselves throughout the competition, I believe it was a definite step forward in promoting the skills evaluation system in this region.

## Our Efforts in Indonesia

### *Efforts to introduce the skills certification system in Indonesia* by Mr. Itsuo Tanigawa, Matsushita Gobel Education Foundation

I have been working for Matsushita Gobel Education Foundation (YPMG) since April 2005. Before that, I worked for many years as a factory consultant to a Japanese corporation in Indonesia where I was in charge of its manufacturing site. My policy was that the development of the local staff should be based on skill.

At a manufacturing site, hands move faster than the head as workers try to manufacture as many products as possible. But many problems emerge as a result. Sometimes defective parts are manufactured, the molds break or the equipment breaks down. However, I believe that when these problems occur, companies that employ a large number of technicians who can deal with the problems can survive the global competition. This is the area where I have been putting my energy into.

As my first task at YPMG, I naturally chose the establishment of a National Trade Skills Evaluation System, which aims to develop technicians, but no such system existed back then. However, JAVADA had been conducting skills evaluation trials at Panasonic, DENSO and EBARA, and I was given an opportunity to take a close look at the program. Through my observation, I found one commonality among the companies. The assignments on examining and evaluating parts were based on the skills test on Machine Inspection in Japan, which I believe became the basis for local quality control.

With holding repeated discussions, in which the companies that were conducting these evaluation trials played a central role, with the help of YPMG, I came across a group promoting the National Professional Certification Board (BNSP: Badan Nasional Sertifikasi Profesi), an external organization of the Ministry of Manpower and Transmigration (MOM&T).

BNSP was established in 2004 and the timing of my discovery could not have been better as it was preparing to introduce a certification test system. It appeared that everything was going smoothly but there were several problems.

One problem was the difference in the skills evaluation method of BNSP and JAVADA. The vocational ability certification system of BNSP required the evaluator to go to the work site, observe the worker, make



Machine inspection evaluators training



Practical test



Written test

an evaluation and then determine the level of certification. As this system took time and could not make fair or effective evaluations, we proposed that they match their system to the evaluation system of JAVADA, and they accepted.

The next problem was formulating the guidelines for carrying out the assignments. JAVADA guidelines are based on Japan's high level of education and many items can easily be determined through general understanding. For Indonesia, however, even small items must be determined, such as a detailed job description of the head evaluators, evaluators and assistants, and detailed instructions on how to conduct fair tests. Therefore the guidelines were formulated by conducting several meetings in which the local people played a central role.



Awarding certificate during a visit to the company

The third problem was training the evaluators. In order to implement the evaluation system of JAVADA, an evaluators training must be held. We requested each company conducting the evaluation trials to elect a candidate, and with support from JAVADA and YPMG, BNSP sponsored the training, which everyone completed successfully. We then reported the result to BNSP. At the same time that they received the certificate from JAVADA, the candidates took BNSP's own evaluation training, resulting in nine machine inspection evaluators.

The fourth problem was the practical test fee. The cost of conducting a skills certification test independently is very high, and it will be difficult to gather a large number of examinees if they have to bear the cost. But by setting the test day as an extension of the in-house skills competition/certification test, we were able to set a reasonable test fee. Of course the participants companies cooperated by covering nearly all the costs.

The fifth problem was creating the written test. As the BNSP system was based on the evaluator going to the site and evaluating the worker's knowledge, they did not have a written test prepared. Therefore, we selected a unit suitable for the assignments and asked the evaluation committee and the team of Polman Astra lecturers to create a written test. Based on this test, we created a text book and distributed it to the examinees of the written test.

Following this course of events, we had managed to award certificates to 38 workers out of 66 by the end of February. The certificates are delivered to the head of the personnel department by the Professional Certifying Bodies Metal Indonesia (LSPLMI), an external organization of BNSP. In addition to awarding the certificates, they explain the details of the certification test program and ask the company for future cooperation.

**We would like to have your comments, opinions, and suggestions for future topics. Please contact us.**

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Contact: Mr. Takada, or Ms. Hayashi  
Japan Vocational Ability Development Association (JAVADA)  
International Cooperation Division,  
International Cooperation Department

10th floor, Sumitomo Fudosan Korakuen Bldg.,  
1-4-1 Koishikawa, Bunkyo-ku, Tokyo 112-8503,  
Japan

TEL 03-5800-3359  
FAX 03-5800-3920  
URL <http://www.kokusai.javada.or.jp>  
e-mail t-takada@javada.or.jp